IN THE SPECIFICATION

Please insert the following paragraph on page 1 after the Title and before the section entitled "Background of the Invention":

The present application is a U.S. national phase filing under 35 U.S.C. 371 of PCT application No. PCT/AU 2004/00349, filed March 19, 2004, which claim the benefit of Australian patent Application No. 2003901325, filed March 21, 2003 each of which are hereby incorporated by reference in its entirety.

IN THE CLAIMS

Please cancel claims 1-64 without prejudice or disclaimer of the subject matter thereof.

Please add new claims 65-136 as follows:

65. (New) A method for detecting the presence of infection by a pathogenic agent, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein a change in said level is indicative of infection by said pathogenic agent.

66. (New) The method of claim 65, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

67. (New) The method of claim 65, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

68. (New) The method of claim 65, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

69. (New) The method of claim 65, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

70. (New) A method for detecting a disease condition, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein a change in said level is indicative of said disease condition.

71. (New) The method of claim 70, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

72. (New) The method of claim 70, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

73. (New) The method of claim 70, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

74. (New) The method of claim 70, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

75. (New) A method of detecting a predisposition to infection by a pathogenic agent, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein a change in said level is indicative of said predisposition to infection by a pathogenic agent.

76. (New) The method of claim 75, wherein said level is compared to a sample selected from the group consisting of a pre-treatment sample and a control sample

77. (New) The method of claim 75, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

78. (New) The method of claim 75, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

79. (New) The method of claim 75, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

80. (New) The method of claim 75, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus,

Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

81. (New) A method for monitoring a response to a therapeutic protocol to prevent infection by a pathogenic agent, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein the efficacy of said therapeutic response is determined by a change in said level.

82. (New) The method of claim 81, wherein said level is compared to a sample selected from the group consisting of a pre-treatment sample and a control sample

83. (New) The method of claim 81, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

84. (New) The method of claim 81, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

85. (New) The method of claim 81, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

86. (New) The method of claim 81, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma,

Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

87. (New) A method for monitoring a response to a therapeutic protocol to prevent development of a disease condition, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein the efficacy of said therapeutic response is determined by a change in said level.

88. (New) The method of claim 87, wherein said level is compared to a sample selected from the group consisting of a pre-treatment sample and a control sample.

89. (New) The method of claim 87, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

90. (New) The method of claim 87, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

91. (New) The method of claim 87, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

92. (New) The method of claim 87, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

93. (New) A method for determining whether a subject will respond to therapeutic intervention of infection by a pathogenic agent, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like

receptors and homologs thereof wherein the efficacy of said therapeutic intervention is determined by a change in said level.

94. (New) The method of claim 93, wherein said level is compared to a sample selected from the group consisting of a pre-treatment sample and a control sample

95. (New) The method of claim 93, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

96. (New) The method of claim 93, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

97. (New) The method of claim 93, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

98. (New) The method of claim 93, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B

virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

99. (New) A method for determining whether a subject will respond to prophylactic intervention of infection by a pathogenic agent, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein the efficacy of said prophylactic intervention is determined by a change in said level.

100. (New) The method of claim 99, wherein said level is compared to a sample selected from the group consisting of a pre-treatment sample and a control sample

101. (New) The method of claim 99, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

102. (New) The method of claim 99, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

103. (New) The method of claim 99, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

104. (New) The method of claim 99, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus,

Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

105. (New) A method for predicting the outcome of a therapeutic protocol to prevent infection by a pathogenic agent, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein the efficacy of said therapeutic protocol is determined by a change in said level.

106. (New) The method of claim 105, wherein said level is compared to a sample selected from the group consisting of a pre-treatment sample and a control sample

107. (New) The method of claim 105, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

108. (New) The method of claim 105, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

109. (New) The method of claim 105, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

110. (New) The method of claim 105, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

111. (New) A method for predicting the outcome of a therapeutic protocol to prevent development of a disease condition, said method comprising determining the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof wherein the efficacy of said therapeutic protocol is determined by a change in said level.

112. (New) The method of claim 111, wherein said level is compared to a sample selected from the group consisting of a pre-treatment sample and a control sample.

113. (New) The method of claim 111, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

114. (New) The method of claim 111, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

115. (New) The method of claim 111, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

116. (New) The method of claim 111, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus,

enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

117. (New) A method of treating a subject infected with a pathogenic agent, said method comprising administering to said subject an effective amount of an agent which affects the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof.

118. (New) The method of claim 117, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

119. (New) The method of claim 117, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

120. (New) The method of claim 117, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

121. (New) The method of claim 117, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium,

Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

122. (New) The method of claim 117, wherein said agent is selected from the group consisting of a large chemical molecule, a small chemical molecule, a nucleic acid molecule, a peptide, a polypeptide, a protein, a RNAi, an antisense molecule and an antibody.

123. (New) A method of treating a subject having a disease condition, said method comprising administering to said subject an effective amount of an agent which affects the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof.

124. (New) The method of claim 123, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

125. (New) The method of claim 123, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

126. (New) The method of claim 123, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

127. (New) The method of claim 123, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

128. (New) The method of claim 123, wherein said agent is selected from the group consisting of a large chemical molecule, a small chemical molecule, a nucleic acid molecule, a peptide, a polypeptide, a protein, a RNAi, an antisense molecule and an antibody.

129. (New) A method of treating a subject having a predisposition to infection with a pathogenic agent, said method comprising administering to said subject an effective amount of an agent which affects the level of a cell surface marker selected from the group consisting of Toll-like receptors and homologs thereof.

130. (New) The method of claim 129, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.

131. (New) The method of claim 129, wherein said marker is affected in a manner selected from the group consisting of up-regulated and down-regulated.

132. (New) The method of claim 129, wherein said marker is determined by analyzing the mRNA or protein associated with said marker.

133. (New) The method of claim 129, wherein said pathogenic agent is selected from the group consisting of Salmonella, Escherichia, Klebsiella, Pasteurella, Bacillus, Clostridium, Corynebacterium, Mycoplasma, Ureaplasma, Actinomyces,Mycobacterium, Chlamydia, Chlamydophila, Leptospira, Spirochaeta, Borrelia,Treponema, Pseudomonas, Burkholderia, Dichelobacter,Haemophilus, Ralstonia, Xanthomonas, Moraxella, Acinetobacter, Branhamella, Kingella, Erwinia, Enterobacter, Arozona, Citrobacter, Proteus, Providencia, Yersinia, Shigella, Edwardsiella,Vibrio, Rickettsia, Coxiella, Ehrlichia, Arcobacteria, Peptostreptococcus, Candida, Aspergillus, Trichomonas, Bacterioides, Coccidiomyces, Pneumocystis, Cryptosporidium, Porphyromonas, Actinobacillus, Lactococcus, Lactobacillua, Zymononas, Saccharomyces, Propionibacterium, Streptomyces, Penicillum, Neisseria, Staphylococcus, Campylobacter, Streptococcus, Enterococcus, Helicobacter, human immunodeficiency virus (HIV), Varicella-Zoster virus (VZV), herpes simplex virus (HSV), human papillomavirus (HPV), Hepatitis B virus (HBV), Hepatitis A virus (HAV), rhinovirus, echovirus, Coxsackievirus, cytomegalovirus, flavivirus, Ebola virus, paramyxovirus, influenza virus, enterovirus,Epstein-Barr virus, Marburg virus, polio virus, rabies virus, rubella virus, smallpox virus, rubeola virus, vaccina virus, adenovirus, rotavirus Hepatitis C virus (HCV) and Hepatitis B virus (HBV).

134. (New) The method of claim 129, wherein said agent is selected from the group consisting of a large chemical molecule, a small chemical molecule, a nucleic acid molecule, a peptide, a polypeptide, a protein, a RNAi, an antisense molecule and an antibody.

135. (New) A composition comprising a compound selected from the group consisting of Toll-like receptors, antagonists of Toll-like receptors, agonists of Toll-like receptors and homologs of Toll-like receptors and one or more pharmaceutically acceptable carriers, and/or diluents.

136. (New) The method of claim 135, wherein said Toll-Like receptor is selected from the group consisting of TLR-2, TLR-4 or a homolog thereof.